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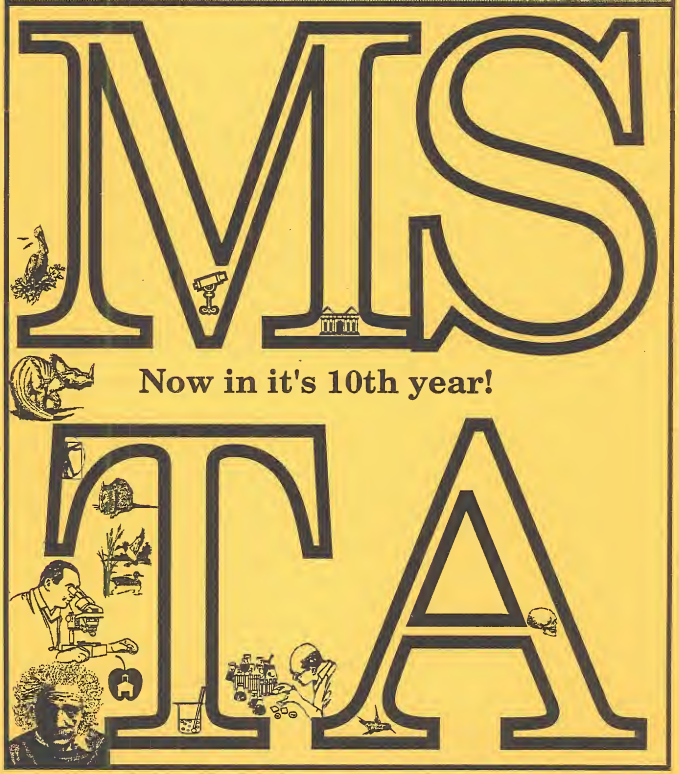
MSTA Newsletter

Montana Science Teachers Association

Dedicated to Quality Science Education

Volume 8
Number 5
Fall 90



About the Cover: The *Montana Science Teachers Association*, now in it's tenth year as an affiliate of NSTA, has never lost sight of helping the individual participate in determining the destiny of science in Montana. Many important decisions concerning the scope and direction of science in our state are strongly influenced by our organization.

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EXCITING CONVENTION PLANNED

The planning for the 1990 *MSTA* Convention is nearly complete. *MSTA* members will have over 100 workshops and sectionals to chose from, including all science areas and all levels. There are sectionals for primary level teachers, middle level teachers, as well as, sectionals for teachers of earth science, biology, chemistry, and physics. Most of the science sectionals have been planned to take place at Bozeman Junior High, but many will be at the *Museum of the Rockies*.

In addition to the sectionals, business meetings have been scheduled for teachers of physics (*MSAAPT*), biology, elementary science, and earth science (*MSTA / MESTA*). The times and places of the meetings are listed in the program along with the sectionals.

The general meeting of *MSTA* is scheduled for Thursday between 5 and 6 PM in the Junior High, room 141. During the *MSTA* general meeting, elections will be held. The offices up for election this year include: President-elect, Secretary, Treasurer, Region II Director, Region IV Director, and Region VI Director. All members of *MSTA* are encouraged to attend the meeting and run for the office.

Larry Kirkpatrick of MSU

will be the featured speaker at the *Bob Makala Memorial Luncheon*. He will be sharing the experiences he had with the 1990 U.S. Physics Team. The Luncheon will be on Friday, October 19, 12 noon until 2 PM at the Baxter Hotel. You may buy your ticket for the luncheon when you preregister for the convention, $5.50.

Plan to visit the *MSTA* hospitality room during the convention in the Junior High Teachers' Lounge in the science wing. Thursday evening, visit the *MSTA* hospitality in the Executive Room of the Holiday Inn between 9 PM and midnight.

The Museum of the Rockies will hold an open house Thursday evening between 7 and 9 PM, open to all convention participants. Short demonstration programs will run continuously throughout the open house. There will be a special event featuring Jack Horner and Jim Manning. A $3 admission charge will be collected at the door.

The Holiday Inn is the *MSTA* convention headquarters motel. We have reserved 30 rooms for *MSTA* members, and encourage you to reserve your room early. If there are no *MSTA* rooms available at the Holiday, you may also reserve a room as an MEA member. To reserve a room, call or write: Holiday Inn, 5 Baxter Lane, Bozeman, Montana 59715, or phone (406) 587-4561.

Duracell Offers Students a Chance to Shine

Most teachers are searching for ways to get their students interested in science. Science fairs and competitions offer an opportunity for students to delve into a project that interests them, and apply their textbook learning to real life. The *Duracell/NSTA Scholarship Competition* gives students in grades 9-12 a great opportunity to express their creativity, apply their classroom learning, and compete for over $30,000 in college scholarships awarded annually.

Creativity is really the key in this invention competition which requires students to design and build a battery-powered device. In a recent survey by NSTA, most past winners indicated that this competition helped them overcome fears of inadequacy in science. Most of these students had previously doubted the worth of their ideas as well as their ability to pursue science or engineering as a career. Working on their *Duracell* projects made them realize they could succeed in these difficult subjects.

It's time to get your students thinking about their *Duracell* projects. You can include the competition in your curriculum or offer

extra credit to students who enter it. You'll be pleasantly surprised at the variety of project ideas students can come up with. All they need is a little encouragement to carry through on their ideas, and actually enter projects in the competition.

The winners of the *1991 Duracell/NSTA Scholarship Competition* will receive their awards this spring at the NSTA National Convention in Houston. The teachers who sponsor these winning students will also be honored in Houston for their invaluable contribution to their student's success. Besides getting an all-expenses paid trip to the Houston Convention, these teachers will be awarded computers.

For more information, applications, and a poster to hang in your classroom, please write to *Duracell/NSTA Scholarship Competition*, 1742 Connecticut Ave. NW, Washington, DC 20009. The results of the survey mentioned above are also available. If you would like a copy of the survey results, please indicate this in your letter.

A summary of this competition is listed on page 4 of this newsletter.

Marilyn & Gil: Makin' It Happen

Gil Alexander, an earth science teacher at Helena High School, received a year's sabbatical from US WEST to pursue professional development. Alexander was one of three winners in *Reaching Beyond Classroom Walls*, a US WEST recognition program for teachers. Alexander was chosen from among a group of outstanding teachers from the 14-state region served by US WEST. He plans to spend his sabbatical writing a curriculum for field studies in water quality assessment and aquatic ecology. He will also present workshops on those subjects at selected schools located along the entire length of the Missouri River.

Marilyn Alexander, another Helena teacher, is one of 76 teachers nationwide selected for a 1990 *Christa McAuliffe Fellowship*. The U.S. Department of Education awards these fellowships to give outstanding teachers an opportunity to increase their knowledge and enrich the learning of their students. McAuliffe fellowships are used for such activities as developing innovative programs, developing model teacher programs, and supporting sabbaticals for academic research.

DURACELL/NSTA SCHOLARSHIP COMPETITION

WHAT IT IS: Students design and build working devices powered by *Duracell* batteries.

WHO IS ELIGIBLE: Students in grades 9-12 residing in the United States.

HOW AND WHEN TO ENTER:

1. Obtain Official Entry Form and rules from your science teacher, or write to NSTA at the address below.
2. Design and build a device which runs on batteries.
3. Write a two-page description *(in English)* describing the device and its uses.
4. Draw a schematic *(wiring diagram)* of the device.
5. Photograph the device.
6. Mail Official Entry Form, typewritten description, schematic, and photos *(DO NOT SEND THE ACTUAL DEVICE AT THIS TIME)* by the entry deadline to:

Duracell/NSTA Scholarship Competition
1742 Connecticut Ave., NW
Washington, DC 20009

7. The 100 top finalists will be notified to send in their actual devices for the final judging.

ENTRY DEADLINE: January 25, 1991 (date varies slightly every year)

AWARDS GIVEN:

Scholarships:
First Place (1) $10,000
Second Place (5) $ 3,000
Third Place (10) $ 500
Cash Prizes: Fourth Place (25) $ 100

Trips: The top six winners, their parents and teacher/sponsors will be flown to Houston, Texas for an Awards Banquet held during the 39th NSTA National Convention in March.

Computers: Teachers of the six top winners will receive personal computers.

Personalized Award Certificates: For the top 100 finalists.

Entry Prize: Everyone who enters will receive a gift.

SPONSORED BY: Duracell USA (administered by the National Science Teachers Association).

Child Killers in the Home

From CPSC Safety Alerts/Fact Sheet	Number of Deaths
Bicycles	(under age 15)est. 400+ per year
Cigarette Lighters	est. 100+ per year
Baby Cribs (many older cribs with wide spaced slats and high corner posts, etc.)	272 ('83-87)
Adult or Youth Beds/Waterbeds Infant Suffocations	200+('85-89)
Plastic Bags (ie. trash, gar~age & dry cleaning bags)	112 ('80-87)
Children's Balloons	110 (since '73)
Child Entrapment in Household Appliances/Picnic Coolers	76 ('80-88)
Window Blind or Drapery Cords	69 (since '81)
Bucket Drownings	67 ('85-87)
Automatic Garage D3ors	44 (since '82)
Small Balls	40 ('74-87)
Bunk Beds	31 (since '73)
High Chairs	22 (up to '87)
Toy Boxes & Toy Chests (without new design lid supports)	21 ('73-84)
Playpens	21 ('83-87)
Baby Rattles	16 (up to '84)
Infant Cushions/Pillows (filled with plastic foam beads)	10 (since '87)

NOTE Urgent warning issued 3/6/90

A number of other products have been reported to have been involved in a total of more than 40 child deaths over the last several years. The products are crib toys, changing tables, baby walkers/jumpers, strollers & carriages, tricycles & riding toys, accordian style baby gates, stuffed animal mobiles, lawn darts (banned in '89), squeeze toy handles, recliner chairs, mobile folding tables and TV/audiovisual carts.

In addition, accidental household poisonings killed 59 children under age 5 in 1986 (down from 216 in '72). Also, over 500 kids under age 16 have died in ATV related accidents since 1982. Many of the ATV deaths and 75 % of the Bicycle deaths are attributed to head injuries; helmet use could prevent many of these deaths. Child drownings in home swimming pools and spas are estimated at over 200 per year; ask for CPSC's Children & Pool Safety Checklist.

This list was compiled by Jerry Bjork of the CPSC Seattle Office. To receive a copy of the Product Safety Alert or Fact Sheet on any of the above products, write or call:

CPSC
P.O. Box 21027
Seattle, WA 98111-3027
206/442-5276

News Briefs

6TH ANNUAL SCIENCE OLYMPIAD AT MONTANA STATE UNIVERSITY 19-20 NOVEMBER. WATCH YOUR MAIL FOR SCIENCE\MATH RESOURCE CENTER SPECIAL FLYER FOR MORE DETAILS OR CONTACT JOAN MUHS AT 994—3580 OR BOB BRIGGS AT 444—4439.

MSTA ANNUAL SCIENCE CONFERENCE IN BOZEMAN OCTOBER 18-19. WATCH YOUR MAIL FOR THE MEA PROGRAM AND THE MSTA SUPPLEMENT. THIS IS THE BIGGEST AND BEST EVER FOR MSTA...THE QUANTITY AND QUALITY OF SESSIONS IS OUTSTANDING.

NEW SCIENCE CURRICULUM TOOL KIT. MSTA, MSAC, AND OPI HAVE WORKED TOGETHER TO PRODUCE A CURRICULUM TOOL KIT FOR SCIENCE CURRICULUM DEVELOPMENT THAT INCLUDES AN MSTA SCIENCE CURRICULUM MODEL AND A NUTSHELL SCIENCE ASSESSMENT TOOL. ALSO AVAILABLE IS A RESOURCE KIT THAT CAN BE CHECKED OUT FORM OPI OR THE VARIOUS COLLEGES AND UNIVERSITIES TO ASSIST WITH SCHOOLS DEVELOPING SCIENCE CURRICULUM. THIS RESOURCE SHOULD BE TO SCHOOLS BEFORE THE CONVENTION IN OCTOBER. CALL BOB BRIGGS AT 444-4439 IF YOU HAVE QUESTIONS.

MSTA MEMBERSHIP RENEWALS ARE OVER DUE. PLEASE USE THE FORM ON THE BACK OF THIS NEWSLETTER.

THE INTERMOUNTAIN JUNIOR SCIENCE SYMPOSIUM INFORMATION PACKET WILL BE ARRIVING AT YOUR SCHOOL SOON. RESEARCH PAPERS WILL BE DUE DECEMBER 1.

THE RESULTS OF THE **1990 PRESIDENTIAL AWARDS FOR EXCELLENCE IN SCIENCE TEACHING** HAVE BEEN DECIDED.

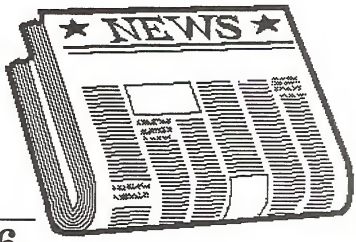
JUDY HENRY FROM BILLINGS IS THE NATIONAL WINNER FOR THE ELEMENTARY SEARCH.

MYRA MILLER OF BOZEMAN AND **ROLLAND KARLIN** OF BIG TIMBER ARE THE STATE ELEMENTARY WINNERS.

RAY HAMILTON FROM GREAT FALLS IS THE NATIONAL WINNER FOR THE SECONDARY SEARCH.

GORDON HAHN OF GLASGOW AND **DAVID MCDONALD** OF SIDNEY ARE THE STATE SECONDARY WINNERS.

ALL WILL RECEIVE RECOGNITION AT THE MSTA ANNUAL MEETING IN BOZEMAN OCTOBER 18—19.



MAX BAUCUS
MONTANA

United States Senate

WASHINGTON, DC 20510

August 21, 1990

Mr. Richard A. Menger
Box 659
Baker, Montana 59313

Dear Richard:

Knowing of your support for designating more of Montana's roadless lands as wilderness, I wanted to personally share with you some of the latest developments of this issue.

As you can can see by the enclosed letter, Montana's wilderness debate probably won't be settled this year. Senator Bumpers is the Chairman of the Subcommittee that has jurisdiction over all wilderness bills. Given Montana time constraints and a lack of agreement among Montanans and their congressional delegation, Senator Bumpers has made it clear that his subcommittee will lay this issue to rest for the year. As Senator Bumpers points out, the atmosphere surrounding this debate has grown increasingly political. And if there is one thing a decade of experience with this issue has taught us, it is that election year politics and a balanced wilderness bill mix about as well as oil and water.

Like you, I want to see this issue settled. While a statewide wilderness bill would have been ideal, I thought we could at least pass a two-forest bill based on the Kootenai and Lolo Accords that local environmentalists and industry workers developed. My hope was that Senator Burns would work with me toward that end. In my view, any steps taken toward the final resolution down the road is better than standing still. Unfortunately, Senator Burns disagreed with this made-in-Montana approach. I'll keep you posted if any changes develop.

Once again, Richard, thanks for participating in this process. Perhaps when the storms of politics has subsided next year, we'll be able to come up with a sensible solution. I've certainly appreciated all your helpful comments during my attempts to resolve the roadless lands question this year and I remain committed to working with all Montanans to reach agreement on a bill early in the next Congress.

Sincerely,

Max Baucus

CONRAD BURNS
MONTANA

COMMITTEE
COMMERCE, SCIENCE, AND TRANSPORTATION
ENERGY AND NATURAL RESOURCES
SMALL BUSINESS

United States Senate

WASHINGTON, DC 20510-2602

August 24, 1990

Mr. Richard Menger
Baker High School
Box 659
Baker, Montana 59313

Dear Richard:

Thank you for the letter and the photographs regarding the Deep Creek area of the Rocky Mountain Front. I appreciated hearing from you.

From your comments, I am sure that you can agree that the Deep Creek area is unique in its environmental, recreational and energy potential. The designation and use of the Rocky Mountain Front has always been a very tough and sensitive topic. In dealing with this area, a host of very important concerns come into play. The maintenance of recreational outlets, wildlife concerns, and the assurance of a healthy Montana future are a few of the entangling topics currently on everyone's mind.

In the wilderness bill which I introduced in March, the final designation of the Deep Creek area is left to a later date when those various complex and competing issues can be ironed out. At this time it would be premature to open the area to uses that would definitely have a permanent and substantial impact on the area. More public input is needed before the final designation of that area can be made.

At the same time, I feel that those oil drilling leases that may presently exist must be honored. Such drilling can be done in an environmentally sound manner which will minimize the impact on the area. What is needed is for sensible, concerned citizens such as yourself to advise the land managers on constructive ways to meet the needs of these important, yet competing interests.

Once again, thank you for taking the time to share your insights on this area. I hope to hear from you again on other important Montana issues.

Sincerely,

Conrad Burns
United States Senator

CRB/sas

RON MARLENEE
MONTANA

Congress of the United States
House of Representatives
Washington, DC 20515

August 7, 1990

Richard A. Menger, MST
Baker High School
Biology Department
Box 659
Baker, Montana 59313

Dear Richard:

Thank you for contacting me to express your support for the addition of the Deep Creek area in my Montana wilderness legislation.

If and when a Montana wilderness bill comes up for consideration in the House, I'll be glad to keep this area in mind. However, I would caution you to to buy into the myth that our only choice is between "protect" or "destroy." In fact, an exhaustive Environmental Impact Statement on proposed drilling in the Gall Creek and Goat Mountain areas of the Rocky Mountain Front showed that, provided certain mitigating actions are taken, the drilling could proceed with only minimal environmental impact.

As you know, Senator Baucus on July 10 introduced S 2832, which he says designates 93,000 acres of wilderness in the Kootenai and Lolo National Forests. It releases 300,000 acres to multiple use. Introduction of this bill followed hearings held on June 25 in Libby and Missoula on wilderness agreements reached by a union group and representatives of two out-of-state corporations.

Local public involvement in the process is commendable. However, I cannot support any agreement that is reached through an exclusive process that fails to include all those groups affected by the creation of more wilderness. Although I did not attend the hearings, I understand that the agreement ran into heavy criticism from the Montana Loggers Association, the Montana Power and Rivers Association, the Montana Wood Products Association, the Montana Mining Association, the Montana Stockgrowers Association, the Montana Snowmobilers Association and other organizations, whose representatives never were consulted by those involved in the process.

You'll recall that Senator Burns on March 6 introduced the Montana Federal Lands Management Act. S 2235 provides for expedient, permanent release of about 2.2 million acres to multiple use, opening up this land to handicapped people, recreationists, campers, loggers, miners, ranchers and many others. S 2235 would designate 620,000 acres of additional wilderness and leave on hold the status of 2.6 million roadless areas.

Richard A. Menger, MST -- Page 2

By comparison, on April 3 Senator Baucus introduced a wilderness bill that would create about 670,000 acres of wilderness and leave unresolved the status of about 1.7 million roadless acres while placing another 325,000 acres into "special study" or management areas. Representative Williams introduced an identical bill (HR 4633) on April 25. Senator Baucus says he bill also would release 3.2 million acres of roadless forest lands. However, the release language in the bill is the same language that has subjected millions of acres of multiple use lands across the nation, and particularly Montana, to abusive appeals.

I say support additional wilderness -- similar to the Forest Service's recommendation of around 580,000 acres of new wilderness -- if we pass clear and concise legislation that protects against frivolous court appeals -- appeals aimed only at locking up the land as "de facto" wilderness.

I believe Senator Burns' bill affords the most reasonable approach towards resolving this issue and I'm ready, willing and I believe able to produce the support of my Republican colleagues that is necessary to resolve this issue.

Best wishes.

Sincerely,

During the first part of June I took a course entitled Wildlands Planning from Bill Cunningham at Missoula. After the course I wrote our Congressmen for their position on the Deep Creek Wilderness. Richard Menger

The More Things Change . . .

For those of you who are constantly hassled by your colleagues when you attempt to make some change I offer this historical perspective:

"Students today can't prepare bark to calculate their problems. They depend upon their slates which are more expensive. What will they do when their slate is dropped and it breaks? They will be unable to write!"
Teachers Conference, 1703

"Students today depend upon paper too much. They don't know how to write on slate without chalk dust all over themselves. They can't clean a slate properly. What will they do when they run out of paper?"
Principal's Association, 1815

"Students today depend too much upon ink. They don't know how to use a pen knife to sharpen a pencil. Pen and ink will never replace the pencil!"
National Association of Teachers, 1907

"Students today depend upon store bought ink. They don't know how to make their own. When they run out of ink they will be unable to write words or ciphers until their next trip to the settlement. This is a sad commentary on modern education."
The Rural American Teacher, 1929

"Students today depend upon these expensive fountain pens. They can no longer write with a straight pen and nib (not to mention sharpening their own quills). We parents must not allow them to wallow in such luxury to the detriment of learning how to cope in the real business world, which is not so extravagant."
PTA Gazette, 1941

"Ball point pens will be the ruin of education in our country. Students use these devices and then throw them away. The American virtues of thrift and frugality are being discarded. Business and banks will never allow such expensive luxuries."
Federal Teacher, 1960

"Students today depend too much on hand-held calculators."
Anonymous, 1985

"Computers should not be used to replace typewriters; the student will never learn respect for skill and accuracy. A letter written on a computer is not a letter at all and I won't take the time to read it."
A Montana English Teacher, 1982

Can you predict what tomorrow's argument will be?

September 5, 1990

ELEMENTARY SCHOOL SCIENCE WORKSHOP FOR MONTANA PRINCIPALS AND TEACHERS

The National Science Foundation (NSF) has provided funding through a PALS (Principals for the Advancement of Leadership in Science) Network to assist schools in improving programs in elementary school science. A training session for up to thirty-eight teams will be conducted in Butte on **October 24-25** and in Missoula on **October 26-27, 1990.** All participants must be in attendance for the first day of the workshop. Presenters will be available on the second day for individual consultation.

Although there will be no expenses or stipends paid, each team will receive approximately $400 worth of hands-on science supplies and print materials which they will receive at the conference and will be allowed to keep after the Science Leadership Conference is presented. Each principal/partnership team will be obliged to present a minimum of one science leadership program. The actual components of those programs will be drawn from the model experiences and resources presented to them in the PALS Network Regional Science Leadership Conference and recorded on an action plan.

Each principal/partnership team member who presents a Local Science Leadership Conference and reports on it will receive a nominal stipend as compensation for planning, conducting, and reporting on the conference. Each person, whether they work as an individual or in partnership teams, can either request $75.00 for a 1/2 day conference (defined as 1-3 hours in length) or $150.00 for a one day conference (defined as over 3 hours in length). Reimbursement will be received directly from the PALS National headquarters in Clarion, Pennsylvania.

The grant period is for three years so there is no rush in presenting your follow-up workshop. It can be done in your own building with your own staff. NSF is concerned about the lack of follow-up on workshops so rather than pay your expenses up front you get the benefit of a kit of materials and up to $300 as a stipend when you do the follow-up workshop. It has a potential benefit of about $700 to the participating schools.

Dr. Greg Stefanich will serve as the primary workshop presenter along with a state science supervisor, science teacher, elementary principal, or university professor. If you are interested, please contact Mr. Bob Briggs at the Office of Public Instruction, State Capital, Helena, Montana 59620 or Greg Stefanich at the following address:

Greg Stefanich, Professor
Education Center 635
University of Northern Iowa
Cedar Falls, Iowa 50614-0606
Telephones (319) 273-2073 office
(319) 273-2167 secretary
(319) 266-3069 home

If you have a definite interest in participating, please complete the application on the following page and return it to Greg Stefanich at the address above as soon as possible.

APPLICATION

Principals as Leaders in Science Workshop (PALS)

We are interested in attending the following Elementary Science Leadership Conference, check one:

_____ October 24-25 in Butte, Montana
Location: West Elementary Science Laboratory, West Elementary School

_____ October 26-27 in Missoula, Montana
Location: Room 24, Administration Building, 215 South Sixth West

We are aware that there will be no expenses or stipends paid through the grant for attendance at the workshop. Travel, housing and lunch will be the responsibility of participants or local districts.

Following the workshop we sill present at least one follow up inservice workshop and will prepare an action plan of proposed activities. We understand that we will receive one Science Survival Kit (SSK) which contains approximately $400 worth of materials for use in the workshop. A nominal stipend ($75.00 for a 1/2 day conference and $150.00 for a one day conference) will be paid to local conference presenters.

1. Name _____
School Address _____

Home Address _____

School Telephone _____ Home Telephone _____
Best time(s) available to be reached: _____

2. Name _____
School Address _____

Home Address _____

School Telephone _____ Home Telephone _____
Best time(s) available to be reached: _____

3. Name _____
School Address _____

Home Address _____

School Telephone _____ Home Telephone _____
Best time(s) available to be reached: _____

The United States Department of Energy (DOE) is pleased to once again sponsor the Teacher Research Associates (TRAC) Program. The program is designed to provide summer research appointments at DOE National Laboratories for mathematics and science teachers annually. TRAC appointments are expected to grow from 150 teachers supported this year to 250 teachers in the 1991 program. We are asking you to nominate six of your State's best teachers for participation in the 1991 program. Highly talented middle school teachers, in addition to high school teachers, are now eligible. Nominees should represent the diverse student populations within your State.

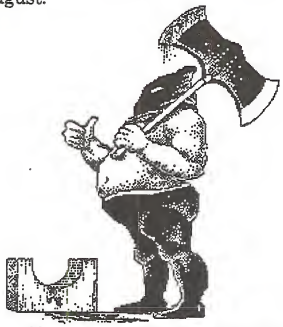
Due to the significant increase of research opportunities for teachers in TRAC, our office is redoubling its efforts to attract TRAC candidates into the 1991 program. In this regard, we are copying the president of the Science Teachers Association in your State on this letter. His/her organization may wish to assist you in identifying TRAC nominees by publicizing the program and directing its members who are interested in TRAC to contact your office for application forms. The teachers will return the completed applications to your office for final nomination. Your office will remain the official contact point for this program. The viability of the final selection process by DOE is greatly enhanced when we receive the full complement of nominations from each State. Please photocopy the enclosed application forms as appropriate.

Teachers will participate in advanced scientific research. They will learn techniques and approaches that will provide outstanding examples of science and mathematics applications for use back in their classrooms. In addition, special seminars and tours will provide the teachers with additional opportunities to update their knowledge in science and mathematics. Each teacher will be named as a DOE Research Associate and will receive an eight-week research assignment at one of the participating DOE National Laboratories, a weekly stipend of $550, and housing and travel allowances paid by the Department of Energy.

Congratulations to Dean Bladow of Laurel, Jon McElroy of Butte, and Paul Dorrance of Helena on their appointments as 1990 DOE Teacher Research Associates.

SHAKHASHIRI REMOVED

Last summer, Bassam Shakhashiri, the popular and effective proponent of improvement in science education, was removed from his position of assistant director for science and engineering education at the National Science Foundation. This action was taken by Erich Bloch before his six year term expired in August.



Shakhashiri started working for the NSF shortly after Congress reinstated the agency's science and engineering education directorate which had been dismantled by the Reagan Administration in 1982. Shakhashiri has been very successful in pushing for attention and for obtaining funding for science education. Under his leadership, the directorate's budget grew faster than NSF's as a whole. This, and his popularity with Congress, is reported to have been a source of tension between him and Bloch.

A new NSF department, called the directorate for education and human resources, will combine the NSF's programs on women, minorities, and the handicapped with its existing education programs. It will be headed by Luther Williams, formerly president of Atlanta University. Williams is reported to be more friendly toward science education at the graduate level than in the precollege grades.

This is a great blow for science education. Last June, the CSTA Board directed President John Fedors to express the Board's regret over this decision to Barbara Mukulski, Chairman of the HUD subcommittee charged with the responsibility of overseeing NSF activities.

Life is partly what we make it, and partly what it is made by the friends whom we choose.

Tehyi Hsieh

Money Available

Resource education grants available to teachers, through local Conservation Districts.

If you have thought of expanding the scope of your classroom activities to include contemporary environmental issues, but lack adequate funding, we can help. Montanas' 59 conservation districts offer grants of up to $500 in matching funds for projects in water quality, land use, and resource conservation.

Applications can be sent to the address below, or to your local Conservation District office.

Frank Mastandrea
Conservation Districts Bureau
DNRC
1520 East 6th Avenue
Helena, Montana 59620
444-6672

The Man Who Planted Trees

In this critically acclaimed film, the breathtaking animation of Frederic Back combines with the rich language of renowned French author Jean Giono to create a film of extraordinary beauty and hope. Back's delicate pastels sweep the audience into the solitary world of Elzeard Bouffier, a world in which one individual, undeterred by great wars and other setbacks, and without thought of reward, can make a significant difference.

This 1987 academy award winning film (best animated film) is available on loan through the Montana State Film Library. Call to reserve your copy today.

Horticulture

A Video Course
Fall 1990-
Spring 1991

Offered by
Department of
Horticulture

Division of
Continuing
Education

Kansas State
University

Kansas State University will be offering the video course *Introduction to Horticulture* beginning this fall through the Division of Continuing Education.

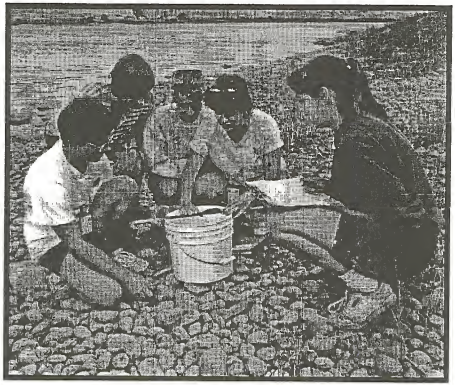
Introduction to Horticulture (Hort 110) is offered for one hour undergraduate credit. It is designed to introduce the student to horticulture and examine the many career opportunities available in the field. The course includes 14, 50-minute videotaped lectures. Developed for agriculture teachers, amateur horticulturists, nursery professionals and students with an interest in horticulture, the course covers such topics as vegetables and fruit crops, floriculture, ornamentals, turfgrass and landscape development.

More information about *Introduction to Horticulture* and other videotape courses and registration procedures is available from the Division of Continuing Education Registration Office, 131 College Court Building, Kansas State University, Manhattan, Kansas 66506, 913/532-5566 or by calling toll free in Kansas, 1-800-432-8222, between 8 a.m. and 6 p.m., Monday through Friday.

Prepared by Rob Batchman
For more information contact
Melinda Sinn at 913/532-5888

Department of Energy Research Institute

Shauna Richardson, a graduate of Belgrade High School in Belgrade, Montana, measures the length of a fish during sampling activities on the Columbia River in Washington state. Richardson was one of 56 high school students from around the United States and four foreign countries to participate in ecosystem research as part of DOE's High School Student Honors Research Institute held at the national laboratory in Richland and Sequim, Washington. Battelle Memorial Institute operates the Pacific Northwest Laboratory for DOE.



Last Minute

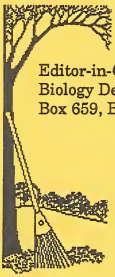
Attention to all elementary science teachers and all BEST members. There will be a meeting of all elementary science teachers and BEST members to form an Elementary Science Teachers Branch of MSTA. This organization will concentrate on increasing communications between all elemnetary science teachers and on problems impacting science that are unique to the elementary classroom.

Attention to all high school chemistry teachers. There will be a meeting of all chemistry teachers to form a Chemistry Teachers Association. This also be a branch of MSTA. This will also allow an affliliation with the American Chemical Society and easier access to the information resources of the ACS. This organization will concentrate on increasing communications between chemistry teachers within the state and with pursuing the goals of MSTA.

The meeting times and places will be advertized at the registration desk, so WATCH FOR IT AND BE THERE!

postage

The MSTA Board of Directors wishes every teacher a very successful 1990-91 school year.



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Montana Science Teachers Association

MSTA will help the individual participate in determining the destiny of science in Montana. The organization serves as a vehicle for educators from all professions to exert positive influences on young people. Many important decisions concerning the scope and direction of science education will be strongly influenced by our organization.

MSTA goals are to increase public awareness, interest and support of science education in Montana.

Membership Category:	
1 year	$ 10.00
2 years	$ 17.00
3 years	$ 24.00
Life	$100.00
Student /Retired	$ 3.00

Membership dues are $10.00 and are payable to Doug Shenkle, Treasurer,1300 Billings Ave , Helena, Montana 59601. Membership includes a one-year subscription (4 issues) to *The Montana Science Teachers Association Newsletter.*